

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 5 77 WEST JACKSON BOULEVARD CHICAGO, ILLINOIS 60604

SUBJECT: CLEAN AIR ACT INSPECTION REPORT

Aacron Anodizing Inc., Plymouth, Minnesota

FROM: Brianna Fenzl, Environmental Engineer

AECAB (IL/IN)

THRU: Nathan Frank, Section Supervisor

AECAB (IL/IN)

TO: File

BASIC INFORMATION

Facility Name: Aacron Anodizing Inc.

Facility Location: 2705 Cheshire Lane North, Plymouth, Minnesota

Date of Inspection: July 12, 2022

EPA Inspector(s):

- 1. Brianna Fenzl, Environmental Engineer
- 2. Meaghan Pashen, Environmental Engineer

Other Attendees:

- 1. Jon Ledin, General Manager and Vice President, Aacron Anodizing Inc.
- 2. Robert Pigi, Quality and Environmental Manager, Aacron Anodizing Inc.
- 3. Caiti Murphy, Environmental Specialist, MMA Environmental

Contact Email Address: caiti.murphy@marshMMA.com; jonledin@aacron.com

Purpose of Inspection: To determine compliance with the Clean Air Act and respond to citizen complaint of yellow emissions from facility

Facility Type: Anodizer Facility

Regulations Central to Inspection: Minnesota Pollution Control Agency (MPCA) Air Permit

Arrival Time: 8:30 AM

Departure Time: 10:05 AM					
Inspe	ection Type:				
\boxtimes	Unannounced Inspection				
	Announced Inspection				
O PEI	NING CONFERENCE				
\boxtimes	Presented Credentials				
\boxtimes	Stated authority and purpose of inspection				
\boxtimes	Provided Small Business Resource Information Sheet See document attached to this				
emai	l delivering this report				
	Small Business Resource Information Sheet not provided.				

The following information was obtained verbally from Aacron Anodizing Inc. (Aacron) unless otherwise noted.

Process Description:

Provided CBI warning to facility

 \boxtimes

Aluminum is brought in via truck on a customer basis. The aluminum is submerged in a series of tanks to complete Aacron's anodizing process. First, the aluminum is washed in a soap tank then rinsed to clean the metal. The next tanks are sodium hydroxide, an alkaline bath, sulfuric acid, and then it is rinsed. After the metal is rinsed, it is placed in the anodizing tank. A hard protective coating is built onto the aluminum by oxidizing the aluminum. If the product requires coloring, it is in deposited in a tin and/or iron electrifying bath for color. Finally, the product is rinsed and placed in a low concentration nickel seal bath. The final product is then packaged and shipped out.

Aacron offers additional specialized finishes depending on customer needs. The Bright Dip tank consisting of phosphoric, sulfuric, and nitric acid is used pre-anodizing if the product requires a shiny finish. This is the only tank attached to the scrubber, that utitlizes sodium hydroxide for scrubbing, on site. For products that require a dull finish, an ammonium bifluoride tank is used.

Staff Interview:

Aacron has been in operation at this location since 1968. There are approximately 80 employees on site. Aacron has two full-service anodizing lines. Their monthly inventory of chemicals and materials used is tracked on a rolling basis.

A performance test was done on the scrubber in 2017 when it was installed. There are no visible emission readings or monitoring done regularly at the facility as a whole or specifically at the scrubber stack. Aacron indicated yellow emissions were seen at the stack when the scrubber was first installed but have not been observed by the facility since.

TOUR INFORMATION

EPA Tour of the Facility: Yes

Data Collected and Observations:

EPA inspectors walked through the facility, observing the two anodizing lines including all tanks, the scrubber attached to the Bright Dip tank, and finished products ready for packaging.

Photos and/or Videos: were taken during the inspection.

See Appendix A.

Field Measurements: were not taken during this inspection.

CLOSING CONFERENCE

Provided U.S. EPA point of contact to the facility

Requested documents:

- 2017 Scrubber performance test
- Concentrations of each chemical in Bright Dip tank connected to scrubber
- Past three years of Annual Emission Reports
- 2021 Total Chemical Usage spreadsheet
- MPCA Air Permit

Concerns: Informed facility of citizen complaint of yellow smoke emitting from facility.

DIGITAL SIGNATURES

Report Author:		
Section Supervisor:		

Facility Name: Aacron Anodizing Inc.

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APPENDICES AND ATTACHMENTS

1. Appendix A: Digital Image Log

Facility Name: Aacron Anodizing Inc.

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APPENDIX A: DIGITAL IMAGE LOG

1. Inspector Name: Meaghan Pashen	2. Archival Record Location: Region 5 Electronic	
	Records Center	

Image Number	File Name	Date and Time* (incl. Time zone and DST)	Description of Image
1	IMG_0118.JPG	7/12/22	Finished product I
2	IMG_0119.JPG	7/12/22	Finished product II
3	IMG_0120.JPG	7/12/22	Finished Product III
4	IMG_0121.JPG	7/12/22	Anodizing line I tanks
5	IMG_0122.JPG	7/12/22	Anodizing line II tanks
6	IMG_0123.JPG	7/12/22	Bright Dip Tank top view I
7	IMG_0124.JPG	7/12/22	Bright Dip Tank top view II
8	IMG_0125.JPG	7/12/22	Dye tank for coloring

^{*}Photos taken between 9:15 AM and 10:05 AM CST.